

Application No.: 10/675,039  
Reply to Final Rejection of January 13, 2005

**Amendments to the Claims**

This listing of claims will replace all prior versions, and listings, of claims in the application.

**Listing of Claims:**

1. (currently amended) A system interface comprising:
  - a plurality of front end directors adapted for coupling to a host computer/server;
  - a plurality of back end directors adapted for coupling to a bank of disk drives;
  - a data transfer section having cache memory, the cache memory being coupled to the plurality of front end and back end directors;
    - wherein the front end and back end directors control data transfer between the host computer/server and the bank of disk drives, such data passes through the cache memory in the data transfer section as such data passes between the host computer and the bank of disk drives;
    - a cache memory manager, adapted to receive queries from the plurality of directors, such cache memory ~~manager~~ manager having therein a memory for storing a map maintaining a relationship between data stored in the cache memory and data stored in the disk drives;
      - wherein the cache memory manager receives the queries from the plurality of directors and operates independently of the plurality of directors in processing such queries to determine for the querying directors whether data to be read from the disk drives, or data to be written to the disk drives, resides in the cache memory;
      - a packet switching network; and
      - wherein the cache memory manager, plurality of front end directors, plurality of back end directors and cache memory are interconnected through the packet switching network.
2. (original) The system recited in claim 1 wherein the cache memory manager is disposed in at least one of the back end directors.

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3. (original) The system recited in claim 1 wherein the memory in the cache memory manager has a plurality of,  $n$ , locations, each one of the locations corresponding to a location in the disk drives, each one of the locations in the memory in the cache memory manager being adapted to store therein a disk address and an indication as to whether data stored or to be stored in such disk location is in the cache memory.

4. (currently amended) The system recited in claim 3 wherein the logical disk address provided by the host computer/server is hashed and the memory in the cache memory manager comprises a plurality of,  $m$ , tables, where  $m$  is greater than one, each one of such  $m$  tables has a plurality,  $n_m$ , locations where the sum of the locations of the  $m$  tables equals  $n$ .

5. (original) The system recited in claim 4 wherein, the cache memory manager, in response to a query of the memory therein provides an indication as to whether data stored or to be stored in such disk location is in the cache memory, and the hashed logical disk address provided by the host computer/server is fed to address one of the  $m$  tables in the cache memory manager.

6. (previously presented) The system recited in claim 1 wherein the system interface includes a message network, such message network operating independently of the data transfer section and being coupled to the plurality of the front end and back end directors for controlling data transfer between the host computer/server and the bank of disk drives in response to messages passing between the front end directors and the back end directors through the messaging network to facilitate data transfer between host computer/server and the bank of disk drives, such data passing through the cache memory in the data transfer section as such data passes between the host computer and the bank of disk drives.